



# CyberVision FAQ

Architecture & Design Questions

Christalign



# CyberVision Common Design Questions

## **Are 10,000 cameras feasible ?**

Each Junction uses a Computer (Control Unit) capable of handling 64 simultaneous video feeds, but CyberVision installs on 16 cameras for improved performance.

## **Can a server support 10,000 Cameras ?**

These Control Units are connected to a main Server which is a Super Computer capable of handling thousands, if not millions of computer nodes. The CyberVision System connects only 625 Computers to a Super Computer.

**625 Control Units \* 16 Cameras = 10,000 Cameras**

## **Current Scenario using a Dual Pentium Dell Server**

**10 Control Units \* 5 Cameras = 50 Cameras**



# Cognitec Biometric Systems

## How fast is the face Recognition Process ?

Biometric Data is obtained from a given photo, which are a series of measurements of the face. These measurements are a series of numbers which are compared against a criminal biometric database containing other such biometric readings.

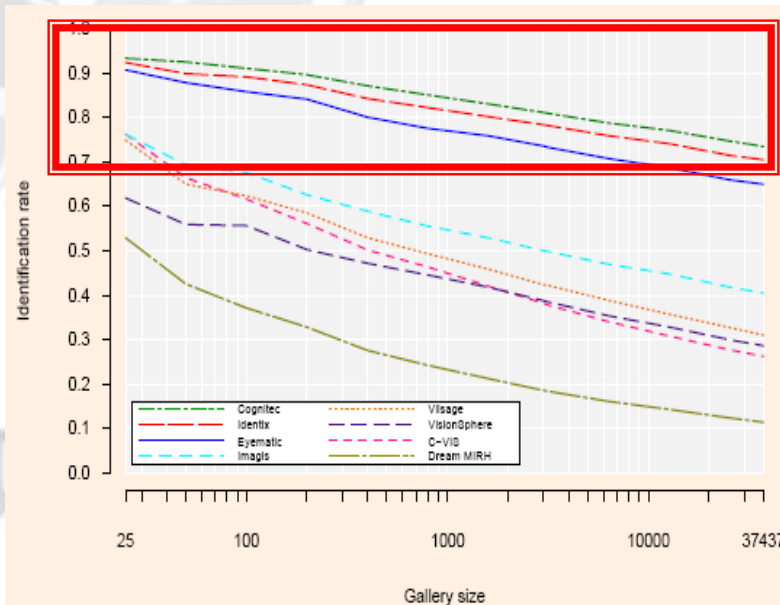
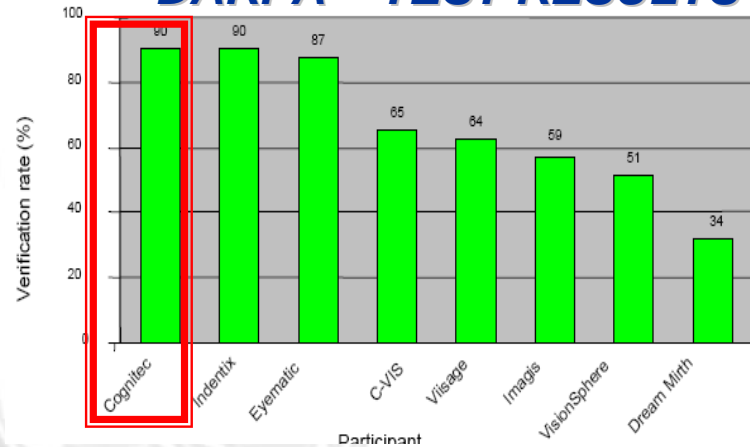
A common computer is capable of handling millions of arithmetic operations per second, where as the CyberVision enhances this system and uses a super computer to verify these biometric data using massive parallel processing and CORBA technology for the highest performance.

CyberVision System takes photos using motion sensors on 10,000 cameras, reads the biometric data and passes this data to a super computer for verification against a criminal database.

## Why Use Cognitec ?

Cognitec is the worlds best face recognition technology in use by both local and federal governments, FBI and the secret service in the US. It is also used in the immigration department, German Federal Force and in use over thousands of police stations world wide.

## DARPA – TEST RESULTS



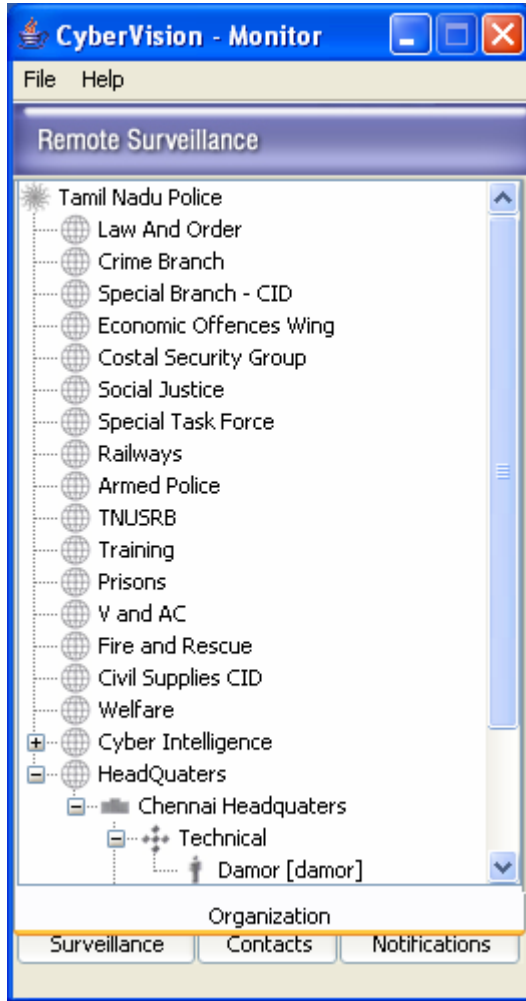


# Wifi Performance

The Wifi Systems can be programmed to use any Channel and frequency. The frequencies to be used are for non-commercial purpose. The channels required by police or defense are by law available to the force.

The Wifi Systems in use are of the highest quality used by International agencies. These systems capable of data communication rates at 54MBPS and over a coverage area of 20 kilometers are in fact placed in less than 10 kilometers in the present scenario.

All Senior Management Officers can conference online and view Surveillance cameras with any laptop with Wifi Access at AP Control Points.





# Need for Multiple Cameras

CyberVision system is not just a surveillance equipment, it is a digital witness program. A Dome camera can be used to zoom in and inspect a junction, but the digital witness needs to always cover what is going on in every direction. So events can be covered as they happen in every direction, and not based on the sole focus of one dome camera.

The CyberVision system deploys 4 immovable cameras for covering a four cross junction and a Dome Camera for closer manual inspection and in controlling of resources and personnel.



# Distributed Vs. Centralized Storage

- Every camera records to a separate video file every hour which contains a timestamp and this is continued for 25 days, after which the data is overwritten every hour starting from the oldest recorded file on disk.
- All this recording collected does not constitute valid data, only when an incident occurs, that file containing the incident is stored in the central database.
- Recording all the video centrally is a poor design as only relevant data needs to be stored with an incident report and FIR in the central database. Moreover it taxes the local network and bandwidth which could be used for other useful purposes like video conferencing and improved high resolution full screen surveillance of any junction.



# Investors

- Christalign can procure investors for funding of the CyberVision projects at low interest rates of up to 7% PA.
- Christalign will provide investors references and contacts for the complete purchase and deployment of the whole CyberVision System.



# Questions





# Thank You !

## Contact:

Phone: 0471 – 5532119

Email : [ruben\\_gerad@christalign.com](mailto:ruben_gerad@christalign.com)

Queries : [info@christalign.com](mailto:info@christalign.com)



Christalign